

AMENDMENTS TO CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) ~~The~~ A voice over internet protocol device capable of auto-selectively dialing up a public switch-switched telephone network or an internet phone, said voice over internet protocol device ~~mainly includes comprising:~~

at least one line transfer switch, which ~~connect~~ connects with a terminal apparatus ~~respectively to receive the~~ a voice signal produced by said terminal apparatus;

a control circuit, which is used to control each component in the entire device, and proceeds with packet ~~process~~ processing for the signal received to produce a corresponding internet protocol packet; ~~and the control circuit connects~~ connecting with the line transfer switch to produce a trigger signal ~~aiming at the setting and power supply status, which makes said line transfer switches proceed transfer operation that causes the at least one line transfer switch to transfer a voice signal produced by said terminal apparatus from at least one subscriber line interface circuit to said public switched telephone network when a power supply failure is detected, wherein the at least one subscriber line interface circuit is connected to said at least one line transfer switch and to said control circuit and arranged to transform the voice signal transmitted from said terminal apparatus to a digital signal, and then transmit the digital signal to the control circuit to proceed with packet processing;~~

a rectifier, which connects with said control circuit to supply ~~the~~ said control circuit the with power required for its normal operation;

~~at least one subscriber line interface circuit, which connect respectively with said line transfer switches and said control circuit to transform the voice signal transmitted from said terminal apparatus to digital signal, the transmit to said control circuit to proceed packet process;~~

at least ~~on one~~ phone detection circuit, which ~~connect respectively~~ is connected with said at least one line transfer ~~switches~~ switch and said control circuit to detect ~~the an~~ employment status of said terminal apparatus;

a ringing detection circuit, which ~~connect respectively~~ is connected with said at least one line transfer ~~switches~~ switch and a loop to detect ~~the an~~ in-coming call ringing signal transmitted from ~~the public switch~~ switched telephone network through said loop, ~~and while wherein when~~ said in-coming call ringing signal is detected, according to the employment status of said terminal apparatus detected by said at least one phone detection ~~circuits~~ circuit, said control circuit ~~can be ordered to trigger a~~ supplies an in-coming call transfer signal to transfer cause said at least one line transfer ~~switches~~, which ~~makes the unused terminal apparatus can be auto-~~ transferred to the status which connects switch to connect said terminal apparatus with said loop to receive said ringing signal when the employment status of said terminal apparatus is that the terminal apparatus is unused, and when said terminal apparatus is picked up, ~~which can proceed to enable~~ communication with a remote terminal apparatus to proceed through said public ~~switch~~ switched telephone network.

2. (Currently Amended) The voice over internet protocol device capable of auto-selectively dialing up a public switch ~~switched~~ telephone network or an internet phone according to Claim 1, wherein there are a plurality of signal contacts equipped on said line transfer switch, wherein a first signal contact connects with said terminal apparatus, and a second signal contact connects with said subscriber line interface circuit, such that while said control circuit is in a normal power supply status, ~~which can produce~~ a trigger signal is produced to make said first and second signal contacts maintain ~~in an~~ electric connection status.

3. (Currently Amended) The voice over internet protocol device capable of auto-selectively dialing up a public switch ~~switched~~ telephone network or an internet phone according to Claim 2, wherein there is a third signal contact equipped on said line transfer switch, said third signal contact ~~can connect~~ connecting with said public ~~switch~~ switched telephone network through said loop, such that while the power supply for said control circuit is broken, ~~a said trigger signal can~~

~~be triggered to make~~ causes said first and second signal contacts to be in an open status, and ~~makes~~ causes said third signal contact to be transferred to an electric connection status with said first signal contact.

4. (Currently Amended) ~~The~~ A processing method for ~~the~~ a voice over internet protocol device capable of auto-selectively dialing up a public switch-switched telephone network or an internet phone, comprising the steps of:

causing a line transfer switch to connect a subscriber line interface circuit with at least one terminal apparatus, said subscriber line interface circuit being arranged to transform a voice signal transmitted from said terminal apparatus into a digital signal and to transform a digital signal received from a control circuit into an in-coming voice signal;

placing said voice over internet protocol device ~~can base on in~~ a preset operation mode; ~~to detect~~ detecting if there is an in-coming call ringing signal transmitted from said public switch-switched telephone network ~~thereon~~[[,]]

if there is one upon detection of an in-coming call ringing signal transmitted from the public switched telephone network, then the checking an employment status of at least one said terminal apparatus connected with said voice over internet protocol device;

~~can be based on making~~ if at least one said terminal apparatus is unused, causing said line transfer switch to disconnect the unused terminal apparatus be transferred from the subscriber line interface and connect the unused terminal apparatus to a loop which the is connected with said public switch-switched telephone network is connected thereon, thereby disconnecting the terminal apparatus from the internet and transferring said in-coming ring signal from said public switched telephone network to said unused terminal apparatus.

5. (Currently Amended) The processing method for the voice over internet protocol device capable of auto-selectively dialing up a public switch-switched telephone network or an internet phone according to Claim 4, wherein when the ringing signal disappears and said terminal apparatus is in ~~idle~~ unused status again, said voice over internet protocol device ~~can make~~ causes said terminal apparatus to be transferred to the status which connects back to a connection with

~~a~~said subscriber line interface circuit ~~thereon to connect~~ re-connect said terminal apparatus with the internet through said subscriber line interface circuit.

6. (Currently Amended) The processing method for the voice over internet protocol device capable of auto-selectively dialing up a public ~~switch~~ switched telephone network or an internet phone according to Claim 5, wherein said voice over internet protocol device ~~can aim at the detects a~~ phone number dialed in said terminal apparatus to judge that the ~~dialed phone of~~ corresponding to said phone number dialed in said terminal apparatus belongs to a public ~~switch~~ switched telephone network or an internet phone, such that said voice over internet protocol device ~~can base on which to transfer~~ selectively transfers said terminal apparatus ~~to the~~ between a status which connects said terminal apparatus with said loop ~~of~~ and a status which connects said terminal apparatus with said subscriber line interface circuit depending on whether said phone number dialed in said terminal apparatus is a phone number of a phone on the public switched telephone network or an internet phone.

7. (New) The processing method for the voice over internet protocol device capable of auto-selectively dialing up a public switched telephone network or an internet phone according to Claim 4, further comprising the step of, when a power supply failure is detected, causing the line transfer switch to transfer a voice signal produced by said terminal apparatus from said subscriber line interface circuit to said public switched telephone network, thereby enabling communications with a remote phone that were originally carried out over the internet to continue over the public switched telephone network despite an interruption in a supply of power to said voice over internet protocol device.